

## Low Carbon Transit Operations Program (LCTOP)

### PROJECT DESCRIPTION AND ALLOCATION REQUEST (SUMMARY)

#### Project Information:

Lead Agency:	San Francisco Bay Area Rapid Transit District
Project Name:	BART Additional Rail Car Procurement Project
Project Type: <i>See Attachment A</i>	A2: Expand/Enhance transit service
Description of Project (Short):	Procurement of new, electric powered passenger vehicles
Project Location:	San Francisco Area
Project Start Date (anticipated):	1-Jul-18
Project End Date (anticipated):	30-Jun-19

#### Funding Information:

Funding Year:	FY 2015-16
Requested Amount of PUC 99313:	
Requested Amount of PUC 99314:	\$4,476,845
Total LCTOP Funding:	\$13,476,845
Total Project Cost:	\$ 13,476,845

#### Project Benefits:

##### Greenhouse Gas Benefits (off of worksheet)

Estimated GHG Reduction:	-13506
Project Life:	25
Estimated Total GHG Reduction:	0

##### Disadvantaged Communities (DAC) Benefits:

Does your service area have a DAC?	yes - several
Does the Project Benefit a DAC?	yes - several
Identify the DAC Census Tracts?	6075017801, 6075023103, 6075012502
Identify Specific DAC Benefit Criteria? <i>See Attachment B</i>	TP 1A: Project provides improved transit or intercity rail service for stations or stops in a disadvantaged community.
Qualitative Description of DAC Benefit?	This project is both located within several DACs & provides benefits to these DACs. Specifically this project provides improved transit rail service for stations in a disadvantaged community by providing greater capacity on existing lines that are nearing capacity. As illustrated on the attached map, eight BART stations are within or on the border of a DAC, and 26 of 44 BART stations are within a zip code that includes a DAC. Every one of the five BART lines runs through a DAC therefore improved service anywhere on the system will benefit a DAC.
Describe the DAC Need Project Addresses?	This project will increase service in DACs as well as in zip codes where DACs benefit.
Total GGRF \$ Allocated to DAC	\$ 2,645,408

##### Co-benefit

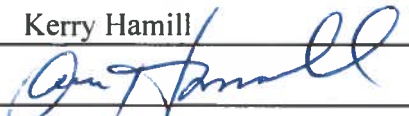
Critical Air Pollution Reduction:	
VMT Reduction:	
Ridership Increase	

**PROJECT DESCRIPTION AND ALLOCATION REQUEST (ALLOCATION)**

<b>Regional Entity:</b>	
<b>Project Lead:</b> San Francisco Bay Area Rapid Transit District	<b>County:</b>
<b>Project Title:</b> BART New Car Procurement	

**Project Lead:**

I certify the scope, cost, schedule, and benefits as identified in the attached Allocation Request (Request) and attachments are true and accurate and demonstrate a fully funded operable project. I understand the Request is subject to any additional restrictions, limitations or conditions that may be enacted by the State Legislature, including the State's budgetary process and/or auction receipts. In the event the project cannot be completed as originally scoped, scheduled and estimated, or the project is terminated prior to completion, project lead shall, at its own expense, ensure that the project is in a safe and operable condition for the public. I understand this project will be monitored by the California Department of Transportation - Division of Rail and Mass Transportation.

<b>Name:</b>	Kerry Hamill
<b>Signature:</b>	
<b>Title:</b>	Assistant General Manager, External Affairs
<b>Agency:</b>	San Francisco Bay Area Rapid Transit District
<b>Date:</b>	26-Jan-16
<b>Amount:</b>	\$ 4,476,845

**Contributing Sponsor(s):**

\*If this project includes funding from more than one project sponsor, the project lead above becomes the "recipient agency" and the additional contributing project sponsor(s) must also sign and state the amount and type of LCTOP funds (PUC Sections 99313 and 99314) contribution. Sign below or **attach a separate officially signed letter providing that information. If there is more than one contributing sponsor, please submit additional page, or a letter from the additional contributors.**

<b>Name:</b>	N / A
<b>Signature:</b>	
<b>Title:</b>	
<b>Agency:</b>	
<b>Date:</b>	
<b>Amount:</b>	

**Low Carbon Transit Operations Program (LCTOP)**

**PROJECT DESCRIPTION AND ALLOCATION REQUEST (FUNDING)**

## Low Carbon Transit Operations Program (LCTOP)

### PROJECT DESCRIPTION AND ALLOCATION REQUEST (FUNDING)

	<i>LCTOP Allocation</i>	15/16	16/17	17/18
<b>Request Amount per PUC 99313:</b>		\$0	\$0	\$0
<b>Request Amount per PUC 99314:</b>		\$4,476,845	\$0	\$0
<b>Total Project Allocation Request:</b>		\$4,476,845	\$0	\$0
<b>Project Title:</b>	BART Additional Rail Car Procurement Project			
<b>Project Location/Address:</b>	Oakland, CA			

**Table 1: Project Lead Information**

#### Legislative District Numbers

Agency Name:	San Francisco Bay Area Rapid Transit District	11, 14, 15, 16, 17, 18, 19, 20, 22,
Contact Person:	Kerry Hamill	Assembly: 24
Contact Phone #:	510-464-6153	Senate: 7, 9, 10, 11, 13,
Email Address:	khamill@bart.gov	Congressional: 9, 11, 12, 13, 14, 15
Address:	300 Lakeside Drive, 18th floor	Amount: PUC Funds Type:
	Oakland, CA 94612	\$ 4,476,845 99314
		\$

**Table 2: Contributing Sponsor Information**

Name:	Amount :	PUC Fund Type:
Contact:	\$	
Contact Phone #:	\$	
Email Address:		
Address:		
<b>Other Contributing Sponsors: (Attach sheet with contact information)</b>	Amount:	PUC Fund Type:
Name:	\$	
Name:	\$	
Name:	\$	
<b>TOTAL</b>	<b>\$4,476,845</b>	

(\*Contributing project sponsors provide signed letters of verification as to amount and eligibility or sign cover page)

## Low Carbon Transit Operations Program (LCTOP)

### PROJECT DESCRIPTION AND ALLOCATION REQUEST (PROJECT)

**Table 3: Type of Project**

**See Attachment A for category of project** (example: Category 1A Implement new or expanded transit service (for new routes or expansion of existing routes)).

Operations Projects			Capital Projects		
	A1			B1	
X	A2			B2	
	A3			B3	
	A4			B4	
	A5				

**Table 4: Project Summary**

**a) Project Description** - Describe the project in your own words, using comprehensive overall project description regarding improvements to be made, increased level of service and performance goals.

BART will use \$4.5 million of FY2015-16 LCTOP funds and \$9.0 million of anticipated FY2016-17 and FY2017-18 LCTOP funds to purchase four additional BART rail cars. The four cars will be used to lengthen some of BART's overcrowded trains, providing added capacity to carry more riders in the San Francisco Area.

**b) Project Location** - Describe the location of the project. Also provide an 8 1/2" X 11" project site map that shows the transit service area and project location. Use link to CalEPA website for information, <http://www.calepa.ca.gov/EnvJustice/GHGInvest/default.htm>.

The project is located in the San Francisco Area, please see the attached map.

**c) Project Life** - For capital projects, state the Useful Life of the Project. For operations project state the number of months service will operate.

Capital: 25 years

Operations:

## Low Carbon Transit Operations Program (LCTOP)

### PROJECT DESCRIPTION AND ALLOCATION REQUEST (BENEFITS/OUTCOMES)

**Table 5: Description of Major Benefits/Outcomes**



**a) Greenhouse Gas Reduction** - Describe how this project will reduce greenhouse gases and any assumptions or data that support this description. For example, "The expanded transit service will reduce VMT and greenhouse gas emissions by replacing auto trips with transit trips. Initial estimates indicate that the expansion could add 50 commuter bus riders per day to replace an average auto trip of 10 miles each way." If available, please provide the expected amount of VMT reductions and greenhouse gas reductions.

BART is using the LCTOP GHG Quantification Calculator developed by ARB. However BART is experiencing a LCTOP GHG Calculator issue. ARB and Caltrans are working to address this issue, BART is submitting its LCTOP application using the existing LCTOP GHG Quantification Calculator; and BART has documented this issue in its application.

The BART-specific calculator uses BART-specific values for GHG emissions by transit vehicles rather than using statewide averages. BART vehicles have particularly low GHG emissions – BART gets 2/3 of the electric power needed to run its vehicles from hydroelectric and solar sources. The average annual VMT replaced is 5,282,545, Total GHG Emission Reduction is calculated to be -13,506. Total GHG Emissions Reduction / Total GGRF funds Requested is 0.0010.

**b) Increased Mode Share** - Describe how this project will directly increase mode share.

This project will increase service on severely crowded BART trains, particularly during the peak weekday periods. Four new/additional cars allows BART to increase the number of trains on existing train sets. This project will increase the number of train cars in revenue service by  $4/666 = 0.6\%$  and annual ridership by 705,600 in the San Francisco Area.

**c) Disadvantaged Communities (DAC) Project Criteria**

See Attachment B for DAC Criteria to Evaluate Projects (example: Category 1B Project provides transit incentives to residents with a physical address in a disadvantage community (e.g., vouchers, reduced fares, transit passes).

Low Carbon Transportation Projects				Transit Projects			
<input checked="" type="checkbox"/>	1A	<input type="checkbox"/>	2A	<input type="checkbox"/>	1A	<input type="checkbox"/>	2E
<input type="checkbox"/>	1B	<input type="checkbox"/>	2B	<input type="checkbox"/>	1B	<input type="checkbox"/>	2F
<input checked="" type="checkbox"/>	1C	<input type="checkbox"/>	2C	<input type="checkbox"/>	1C	<input type="checkbox"/>	2G
<input type="checkbox"/>	1D			<input type="checkbox"/>	1D	<input type="checkbox"/>	2H
				<input type="checkbox"/>	1E	<input checked="" type="checkbox"/>	2C
				<input type="checkbox"/>	1F	<input type="checkbox"/>	2D

**d) Disadvantaged Communities (DAC) (if applicable\*)** - Describe how this project will directly benefit the DAC(s) within your service area in your own words. For agencies whose service area includes disadvantaged communities, at least 50 percent of the total moneys received shall be expended on projects that will benefit disadvantaged communities.

The addition of 4 new cars to the existing fleet will provide for increased passenger capacity via longer trains running throughout the BART system which includes several disadvantaged communities in it's service area as shown on the attached map.

**Low Carbon Transit Operations Program (LCTOP)**

**PROJECT DESCRIPTION AND ALLOCATION REQUEST (BENEFITS/OUTCOMES)**

**Table 5: Description of Major Benefits/Outcomes**

**e) Co-Benefits** - Check all additional Benefits/Outcomes.

☒ Improved Safety

<input type="checkbox"/> Improved Public Health <input type="checkbox"/> Reduced Operating/Maintenance Cost <input checked="" type="checkbox"/> Increase System Reliability <input checked="" type="checkbox"/> Other Benefits (describe below)	<input type="checkbox"/> College/University <input type="checkbox"/> Grades K-12 <input type="checkbox"/> Promotes Active Transportation (walking, biking) <input type="checkbox"/> Promotes integration with other modes of transportation
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**f) Co-Benefits** - Describe benefits indicated above in d) and any other benefits not listed.

The BART system serves numerous disadvantaged communities and by adding additional cars these communities will experience increased passenger capacity via longer trains.

**Table 6: Project Schedule**

Capital Projects	
Begin Construction Phase ( <b>Contract Award</b> )	
End Construction Phase ( <b>Contract Acceptance</b> )	
Begin Vehicle/Equipment Order ( <b>Contract Award</b> )	
End Vehicle/Equipment Order ( <b>Contract Acceptance</b> )	
Begin Closeout Phase	
End Closeout Phase	

Operations Projects	
Begin expanded/enhanced transit services	1-Jul-18
End expanded/enhanced transit services	30-Jun-19
Begin Closeout Phase	1-Jul-19
End Closeout Phase	31-Dec-19

**START DATE FOR LCTOP FUNDED PHASES MAY NOT PROCEED PROJECT APPROVAL LETTER.**

*Pre-construction costs (e.g design, environmental and right-of-way) are not eligible to be funded by LCTOP funds, they must be funded by other sources.*

## Low Carbon Transit Operations Program (LCTOP)

### PROJECT DESCRIPTION AND ALLOCATION REQUEST (OPERATIONS DESCRIPTION)

**Table 7: Operations Project Description**

a) Describe the operating plan for this system.

BART currently experiences extremely overcrowded conditions during weekday peak periods. Providing more train capacity during these periods would reduce overcrowding and result in increased BART peak period ridership. BART's existing operating plan will be used and the additional rail cars will be incorporated to produce longer trains.

b) Describe the fare structure for this system.

BART's current fare structure applies. BART rail fares are computed using a distance-based formula. Distance-based fares are then adjusted based on the scheduled travel time versus travel time based on a system-wide average speed. In addition, surcharges apply to transbay trips and trips originating from or destined to stations located in San Mateo County, and a premium applies to trips to and from the San Francisco International Airport Station.

c) Describe the assumptions and process that were used to develop the ridership projections shown in the request.

Estimated using 2012 National Transit Database figures

- ☐ Average weekday unlinked trips: 391,777
- ☐ Vehicles available for maximum service: 666
- ☐ Average weekday trips per vehicle = average weekday trips / vehicles available = 588
- ☐ Increase in average weekday trips = 588 trips/vehicle x 4 vehicles = 2,352
- ☐ Ridership annualization factor = 300


d) Describe the assumptions and process for how the operating cost projections were developed.

The per-vehicle cost was derived using the approved project budget divided by the total number of vehicles to be procured. Please see the attached MS Word file labeled "Documentation" which outlines the inputs used.

## Low Carbon Transit Operations Program TOTAL PROJECT COST AND FUNDING PLAN

The following Funding Plan has been reviewed and approved by the undersigned. It includes a complete list of funds for this project and is the total cost of the project, including LCTOP funds.

Todd Morgan	510-464-6551	Date: 1-26-2016
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Approval Authority: Sign and date	Kerry Hamill, 510-464-6153 
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Shaded fields are automatically calculated. Please do not fill these fields.

Proposed Total Project Cost (\$1,000s)								Project
Component	Prior	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21+	Total
PA&ED	0	0	0	0	0	0	0	0
PS&E	0	0	0	0	0	0	0	0
R/W	0	0	0	0	0	0	0	0
CON	0	0	0	0	0	0	0	0
Veh/Equip Purchase	0	4,477	4,500	4,500	0	0	0	13,477
Operations/Other	0	0	0	0	0	0	0	0
<b>TOTAL</b>	0	4,477	4,500	4,500	0	0	0	13,477

Low Carbon Transit Operations Program (LCTOP) (\$1,000s)								Total
Component	Prior	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21+	Total
PA&ED								0
PS&E								0
R/W								0
CON								0
Veh/Equip Purchase		4,477	4,500	4,500				13,477
Operations/Other								0
<b>TOTAL</b>	0	4,477	4,500	4,500	0	0	0	13,477

Funding Source:								Total
Component	Prior	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21+	Total
PA&ED								0
PS&E								0
R/W								0
CON								0
Veh/Equip Purchase								0
Operations/Other								0
<b>TOTAL</b>	0	0	0	0	0	0	0	0

Funding Source:								Total
Component	Prior	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21+	Total
PA&ED								0
PS&E								0
R/W								0
CON								0
Veh/Equip Purchase								0
Operations/Other								0
<b>TOTAL</b>	0	0	0	0	0	0	0	0

Funding Source:								Total
Component	Prior	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21+	Total
PA&ED								0
PS&E								0
R/W								0
CON								0
Veh/Equip Purchase								0
Operations/Other								0
<b>TOTAL</b>	0	0	0	0	0	0	0	0



## **Documentation in Support of BART's Application for FY2015-16 LCTOP Funding for Additional Rail Cars Project**

### **❖ Project Description**

- BART currently experiences extremely overcrowded conditions during weekday peak periods. Providing more train capacity during these periods would reduce overcrowding and result in increased BART peak period ridership.
- BART will use \$4.5 million of FY2015-16 LCTOP funds and \$9.0 million of anticipated FY2016-17 and FY2017-18 LCTOP funds to purchase four additional BART rail cars. The four cars will be used to lengthen some of BART's overcrowded trains, providing added capacity to carry more riders.

### **❖ Input Data Assumptions**

#### **➤ Year 1**

- BART expects to receive the four additional rail cars in 2018

#### **➤ Year F**

- Rail cars are expected to last 25 years (see Useful Life, below). Thus, the final year is  $2018 + 25 = 2043$

#### **➤ Year 1 annual ridership**

- Estimated using 2012 National Transit Database figures
- Average weekday unlinked trips: 391,777
- Vehicles available for maximum service: 666
- Average weekday trips per vehicle = average weekday trips / vehicles available = 588
- Increase in average weekday trips =  $588 \text{ trips/vehicle} \times 4 \text{ vehicles} = 2,352$
- Ridership annualization factor = 300
- Year 1 annual ridership =  $2,352 \times 300 = 705,600$

#### **➤ Year F annual ridership**

- Average weekday trips per vehicle is not expected to change significantly over time
- Year 25 annual ridership = Year 1 annual ridership = 705,600

#### **➤ A (Adjustment factor to account for transit dependency)**

- Used default value of 0.83 for long distance commuter service

#### **➤ L (Length of average auto trip reduced)**

- Estimated using 2012 National Transit Database figures
- BART annual passenger miles: 1,545,717,976
- BART annual trips: 118,674,764
- Average trip length = annual passenger miles / annual trips = 13.02 miles

#### **➤ AA (Adjustment factor to account for auto trips used to access transit service)**

- Used default value of 0.8 for long distance commuter service

#### **➤ LL (Length of average trip for auto access to transit)**

- Used default value of 5 miles for long distance commuter service

#### **➤ Fuel Type**

- BART trains are all electric

#### **➤ Annual VMT**

- Annual VMT per vehicle operated estimated using 2012 National Transit Database figures:
- BART annual vehicle revenue miles: 63,439,052
- BART vehicles operated in maximum service: 534

- Annual VMT per vehicle operated = annual vehicle revenue miles / vehicles operated in maximum service = 118,800
- Annual VMT = annual VMT per vehicle operated x 4 vehicles = 475,200

➤ **Useful Life**

- Used minimum values from FTA Circular 5010.1D of 25 years for rail vehicles

➤ **FY 2015-16 LCTOP Funds Requested (\$)**

- All FY2015-16 LCTOP funds available to BART will be allocated to this project

➤ **Total LCTOP Funds Requested (\$)**

- Estimated \$9 million of FY2016-17 and FY2017-18 LCTOP funds will be allocated to this project

➤ **Total GGRF Funds Requested (\$)**

- No other GGRF funds are being used for this project

❖ **Total GHG Emissions Reductions**

- On 11 January 2016, BART expressed a concern to ARB regarding the Total GHG Emissions Reductions estimated by the LCTOP GHG Quantification Calculator
  - BART believes that the statewide average GHG emissions by transit vehicles assumed by the LCTOP GHG Quantification Calculator are much greater than the actual GHG emissions for BART vehicles. BART vehicles have particularly low GHG emissions – BART gets 2/3 of the electric power needed to run its vehicles from hydroelectric and solar sources.
- On 28 January 2016, BART was informed that
  - 1) ARB and Caltrans are working to resolve this issue;
  - 2) BART should submit its LCTOP application using the existing LCTOP GHG Quantification Calculator; and
  - 3) BART should document this issue in its application (provided below).

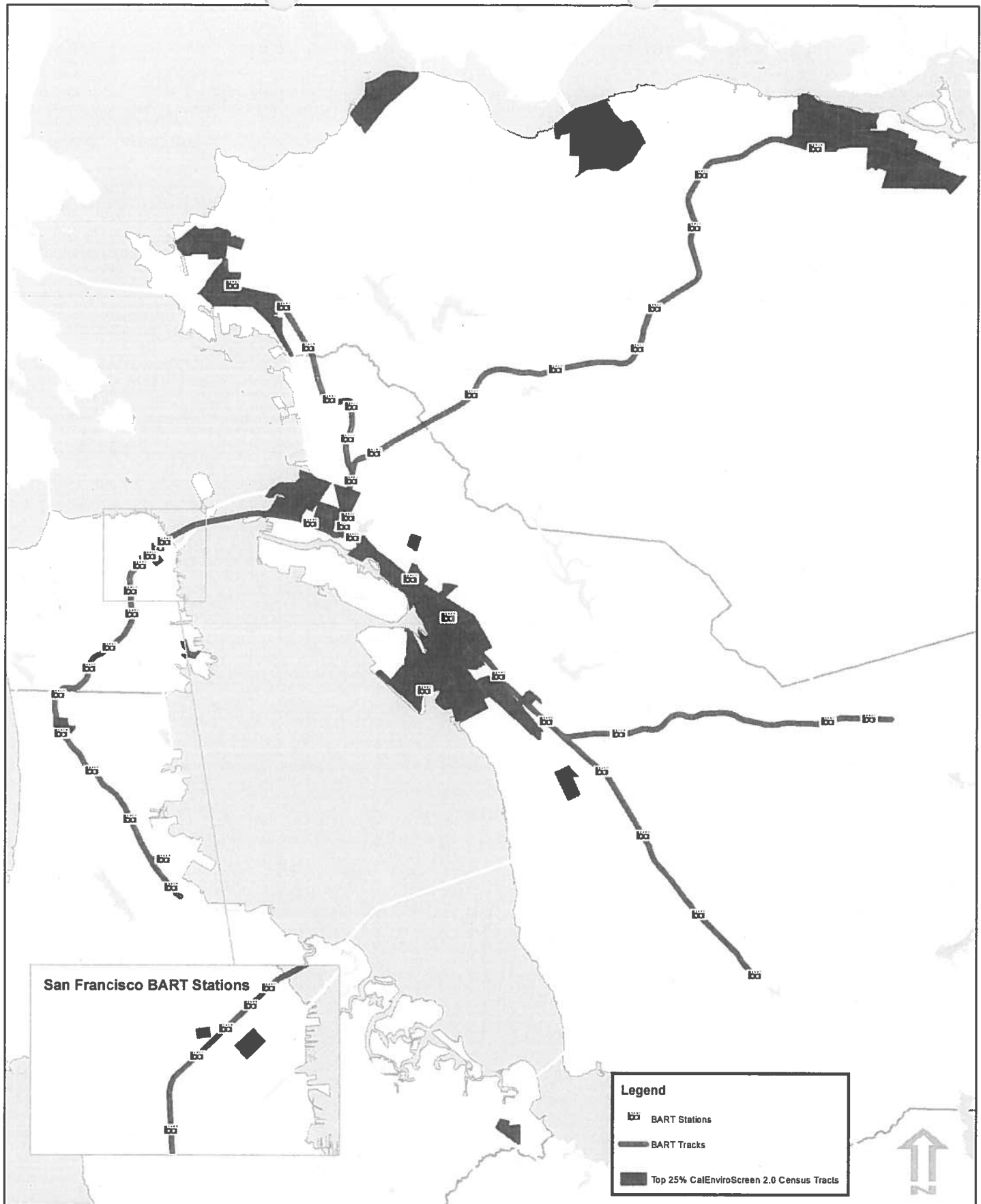
➤ **BART Calculation of Total GHG Emissions Reductions**

- The LCTOP GHG Calculator estimates total GHG emissions reduction from the project to be -13,505.71 MTCO<sub>2</sub>e
- BART estimates the total GHG emissions reductions from the project are 25,988.25 MTCO<sub>2</sub>e
- BART developed this estimate using the following calculations
  - Annual average auto VMT displaced (from LCTOP GHG Calculator): 5,282,544.96
  - Total GHG emissions from displaced autos: 52,927.25 MTCO<sub>2</sub>e
    - ◆ Above value developed by replacing 475,200 with zero for the Annual VMT for New/Expanded Vehicles Detail in the LCTOP GHG Calculator
  - Annual average VMT from new vehicles: 475,200
  - BART GHG emissions per vehicle mile (from BART 2013 GHG Inventory):
    - ◆ 0.0022676 MTCO<sub>2</sub>e/vehicle mile
  - Annual GHG emissions from new vehicles = 475,200 x 0.0022676 = 1,077.56 MTCO<sub>2</sub>e
  - Total GHG emissions from new vehicles = 1,077.56 MTCO<sub>2</sub>e x 25 years = 26,939.00 MTCO<sub>2</sub>e
  - Total GHG emissions reductions from the project = 52,927.25 MTCO<sub>2</sub>e - 26,939.00 MTCO<sub>2</sub>e = 25,988.25 MTCO<sub>2</sub>e



# SB 535 Disadvantaged Communities in the BART System

Map Date: 4/3/2015



CalEnviroScreen (California Communities Environmental Health Screening Tool) was developed by OEHHA at the request of CalEPA to identify California's most pollution-burdened and vulnerable communities. This map shows the disadvantaged communities designated by CalEPA for the purpose of SB 535. These areas represent the 25% highest scoring census tracts in CalEnviroScreen 2.0

EGIS Data Provided by the BART Office of the CIO, 300 Lakeside Dr, 11th Floor, Oakland, CA 94612



**Low Carbon Transit Operations Program (LCTOP)  
AUTHORIZED AGENT**

AS THE Vice President, Board of Directors  
(Chief Executive Officer / Director / President / Secretary)

OF THE San Francisco Bay Area Rapid Transit District (BART)  
(Name of County/City Organization)

I hereby authorize the following individual(s) to execute for and on behalf of the named Regional Entity/Transit Operator, any actions necessary for the purpose of obtaining Low Carbon Transit Operations Program (LCTOP) funds provided by the California Department of Transportation, Division of Rail and Mass Transportation. I understand that if there is a change in the authorized agent, the project sponsor must submit a new form. This form is required even when the authorized agent is the executive authority himself. I understand the Board must provide a resolution approving the Authorized Agent. The Board Resolution appointing the Authorized Agent is attached.

Grace Crunican, General Manager OR  
(Name and Title of Authorized Agent)

Kerry Hamill, Assistant General Manager, Office of External Affairs OR  
(Name and Title of Authorized Agent)

\_\_\_\_\_  
(Name and Title of Authorized Agent)

Gail Murray Vice President, Board of Directors  
(Print Name) (Title)

Gail Murray  
(Signature)

Approved this 26th day of January, 2016

Attachment: Board Resolution approving Authorized Agent



## Low Carbon Transit Operations Program (LCTOP) CERTIFICATIONS AND ASSURANCES

**Project Sponsor:** San Francisco Bay Area Rapid Transit District

**Agency Name:** \_\_\_\_\_

**Effective Date of this Document:** January 26, 2016

The California Department of Transportation (Department) has adopted the following certifications and assurances for the Low Carbon Transit Operations Program. As a condition of the receipt of LCTOP funds, project lead must comply with these terms and conditions.

### A. General

- (1) The project lead agrees to abide by the current LCTOP Guidelines and applicable legal requirements.
- (2) The project lead must submit to the Department a signed Authorized Agent form designating the representative who can submit documents on behalf of the project sponsor and a copy of the board resolution appointing the Authorized Agent.

### B. Project Administration

- (1) The project lead certifies that required environmental documentation is complete before requesting an allocation of LCTOP funds. The project lead assures that projects approved for LCTOP funding comply with Public Resources Code § 21100 and § 21150.
- (2) The project lead certifies that a dedicated bank account for LCTOP funds only will be established within 30 days of receipt of LCTOP funds.
- (3) The project lead certifies that when LCTOP funds are used for a transit capital project, that the project will be completed and remain in operation for its useful life.
- (4) The project lead certifies that it has the legal, financial, and technical capacity to carry out the project, including the safety and security aspects of that project.
- (5) The project lead certifies that they will notify the Department of pending litigation, dispute, or negative audit findings related to the project, before receiving an allocation of funds.
- (6) The project lead must maintain satisfactory continuing control over the use of project equipment and facilities and will adequately maintain project equipment and facilities for the useful life of the project.
- (7) Any interest the project lead earns on LCTOP funds must be used only on approved LCTOP projects.
- (8) The project lead must notify the Department of any changes to the approved project with a Corrective Action Plan (CAP).
- (9) Under extraordinary circumstances, a project lead may terminate a project prior to completion. In the event the project lead terminates a project prior to completion, the project lead must (1) contact the Department in writing and follow-up with a phone call verifying receipt of such notice; (2) pursuant to

verification, submit a final report indicating the reason for the termination and demonstrating the expended funds were used on the intended purpose; (3) submit a request to reassign the funds to a new project within 180 days of termination.

- (10) Funds must be encumbered and liquidated within the time allowed.

### C. Reporting

- (1) The project lead must submit the following LCTOP reports:
  - a. Semi-Annual Progress Reports by May 15<sup>th</sup> and November 15<sup>th</sup> each year.
  - b. A Final Report within six months of project completion.
  - c. The annual audit required under the Transportation Development Act (TDA), to verify receipt and appropriate expenditure of LCTOP funds. A copy of the audit report must be submitted to the Department within six months of the close of the year (December 31) each year in which LCTOP funds have been received or expended.
- (2) Other Reporting Requirements: ARB is developing funding guidelines that will include reporting requirements for all State agencies that receive appropriations from the Greenhouse Gas Reduction Fund. Caltrans and project sponsors will need to submit reporting information in accordance with ARB's funding guidelines, including reporting on greenhouse gas reductions and benefits to disadvantaged communities.

### D. Cost Principles

- (1) The project lead agrees to comply with Title 2 of the Code of Federal Regulations 225 (2 CFR 225), Cost Principles for State and Local Government, and 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.
- (2) The project lead agrees, and will assure that its contractors and subcontractors will be obligated to agree, that:
  - a. Contract Cost Principles and Procedures, 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31, et seq., shall be used to determine the allow ability of individual project cost items and
  - b. Those parties shall comply with Federal administrative procedures in accordance with 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments. Every sub-recipient receiving LCTOP funds as a contractor or sub-contractor shall comply with Federal administrative procedures in accordance with 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.
- (3) Any project cost for which the project lead has received funds that are determined by subsequent audit to be unallowable under 2 CFR 225, 48 CFR, Chapter 1, Part 31 or 49 CFR, Part 18, are subject to repayment by the project lead to the State of California (State). All projects must reduce greenhouse gas emissions, as required under Public Resources Code section 75230, and any project that fails to reduce greenhouse gases shall also have its project costs submit to repayment by the project lead to the State. Should the project lead fail to reimburse moneys due to the State within thirty (30) days of demand, or within such other period as may be agreed in writing between the Parties hereto, the State is authorized to intercept and withhold future payments due the project lead from the State or any third-party source, including but not limited to, the State Treasurer and the State Controller.

#### E. Record Retention

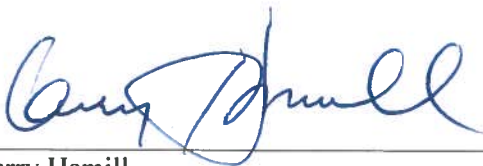
- (1) The project lead agrees, and will assure that its contractors and subcontractors shall establish and maintain an accounting system and records that properly accumulate and segregate incurred project costs and matching funds by line item for the project. The accounting system of the project lead, its contractors and all subcontractors shall conform to Generally Accepted Accounting Principles (GAAP), and enable the determination of incurred costs at interim points of completion. All accounting records and other supporting papers of the project lead, its contractors and subcontractors connected with LCTOP funding shall be maintained for a minimum of three (3) years after the "Project Closeout" report or final Phase 2 report is submitted (per ARB Funding Guidelines, Vol. 3, page 3.A-16), and shall be held open to inspection, copying, and audit by representatives of the State and the California State Auditor. Copies thereof will be furnished by the project lead, its contractors, and subcontractors upon receipt of any request made by the State or its agents. In conducting an audit of the costs claimed, the State will rely to the maximum extent possible on any prior audit of the project lead pursuant to the provisions of federal and State law. In the absence of such an audit, any acceptable audit work performed by the project lead's external and internal auditors may be relied upon and used by the State when planning and conducting additional audits.
- (2) For the purpose of determining compliance with Title 21, California Code of Regulations, Section 2500 et seq., when applicable, and other matters connected with the performance of the project lead's contracts with third parties pursuant to Government Code § 8546.7, the project sponsor, its contractors and subcontractors and the State shall each maintain and make available for inspection all books, documents, papers, accounting records, and other evidence pertaining to the performance of such contracts, including, but not limited to, the costs of administering those various contracts. All of the above referenced parties shall make such materials available at their respective offices at all reasonable times during the entire project period and for three (3) years from the date of final payment. The State, the California State Auditor, or any duly authorized representative of the State, shall each have access to any books, records, and documents that are pertinent to a project for audits, examinations, excerpts, and transactions, and the project lead shall furnish copies thereof if requested.
- (3) The project lead, its contractors and subcontractors will permit access to all records of employment, employment advertisements, employment application forms, and other pertinent data and records by the State Fair Employment Practices and Housing Commission, or any other agency of the State of California designated by the State, for the purpose of any investigation to ascertain compliance with this document.

#### F. Special Situations

The Department may perform an audit and/or request detailed project information of the project sponsor's LCTOP funded projects at the Department's discretion at any time prior to the completion of the LCTOP.

I certify all of these conditions will be met.

BY:



Kerry Hamill  
Assistant General Manager, External Affairs

BEFORE THE BOARD OF DIRECTORS OF THE SAN FRANCISCO  
BAY AREA RAPID TRANSIT DISTRICT

In the Matter of Authorizing the Execution of  
A Project Application for the FY 2015-16  
Low Carbon Transit Operations Program  
Additional Rail Cars Project

Resolution No. 5309

**WHEREAS**, the San Francisco Bay Area Rapid Transit District may receive state funding for transit projects from the Low Carbon Transit Operations Program (LCTOP) now or sometime in the future; and

**WHEREAS**, the statutes related to state-funded transit projects require a local or regional implementing agency to abide by applicable regulations; and

**WHEREAS**, Senate Bill 862 (2014) named the California Department of Transportation (Caltrans) as the administrative agency for the LCTOP; and

**WHEREAS**, Caltrans has developed guidelines for the purpose of administering and distributing LCTOP funds to eligible project sponsors (local agencies); and

**WHEREAS**, BART wishes to implement the LCTOP Additional Rail Car project,

**NOW, THEREFORE, BE IT RESOLVED** by the BART Board of Directors that it agrees to comply with all conditions and requirements set forth in the applicable statutes, regulations and guidelines for all LCTOP funded transit projects; and


**NOW, THEREFORE, BE IT RESOLVED** by the Board of Directors of the San Francisco Bay Area Rapid Transit District that it hereby authorizes the submittal of the Additional Rail Cars Project nomination(s) and allocation request of \$4,476,845 to Caltrans for FY 2015-16 LCTOP funds:

**AGENCY BOARD DESIGNEE:**

**BY:** \_\_\_\_\_

Adopted : February 11, 2016

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT  
CERTIFIED A TRUE COPY

  
KENNETH A. DURON, DISTRICT SECRETARY

BEFORE THE BOARD OF DIRECTORS OF THE SAN FRANCISCO  
BAY AREA RAPID TRANSIT DISTRICT

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A Project Application for the FY 2015-16  
Low Carbon Transit Operations Program  
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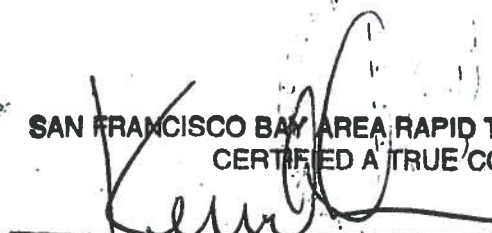
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